

CURRENT REDUCTION BY DYNAMIC RECEIVER ADJUSTMENT IN A COMMUNICATION DEVICE

ABSTRACT OF THE DISCLOSURE

A method for reducing current drain in a communication device includes a first step of detecting interference including intermodulation and crossmodulation products. A next step includes determining a frequency offset of the interference with reference to the operating receiver band. A next step includes measuring a power level of the interference. A next step includes calculating a receiver linearity required to achieve a desired signal-to-interference ratio. A next step includes adjusting the receiver linearity in order to achieve the desired signal-to-interference ratio. Optionally, the receiver dynamic range can be adjusted to suit the reduced signal swing due to the reduced linearity.